

(highest vs. lowest category HR=1.98, 95% CI: 0.94–4.16,  $p = 0.07$ , trend HR=1.23, 95% CI: 0.96–1.57,  $p = 0.10$ ) and when BMI was included (trend HR=1.21, 95% CI: 0.94–1.55,  $p = 0.13$ ).

**Conclusion** The association between PA and cancer risk is dependent on the age at which PA is measured. This possibly reflects occupational activity and differences in general medical health with age or residual confounding. The associations were similar when adjusted for BMI, suggesting an independent mechanism of PA. If the inverse association of increased PA in younger participants is causal, one in six cases of pancreatic cancer might be prevented by encouraging more PA. Aetiological studies should measure PA at different ages when investigating pancreatic cancer.

**Disclosure of Interest** None Declared.

#### PTH-093 CHROMOGRANIN-A : CAN IT PREDICT RADIOLOGICAL PROGRESSION IN NEUROENDOCRINE TUMOURS?

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**Introduction** Chromogranin A (CgA) is considered as the best general marker for the diagnosis and follow-up of neuroendocrine tumours (NETs) and is also of prognostic value. In literature, there are no available studies which analysed the role of CgA as a predictor of radiological disease progression in all NETs. Present study investigates the prognostic value of CgA as a predictor of radiological disease progression in NET patients.

**Methods** Patients with metastatic NETs and evidence of Radiological Progression (RP) according to RECIST 1.1 were identified from a NET database. Plasma CgA were measured 6 and 12 months before RP and at the event of RP. CgA was measured with the Supra-regional-Assay-Service radioimmunoassay (Hammersmith Hospital), normal value <60 pmol/L. The tumours were graded according to the 2010 WHO classification, as G1 (Ki67 <2%), G2 (Ki67: 2–20%), G3 (Ki67 >20%).

**Results** 152 patients were evaluable including 91 midgut NET and 61 pancreatic NETs (PNETs). Of these, 56 were G1 NETs, 65 G2, 10 G3, 21 of unknown histology. 95.4% of the patients had liver metastases, whereas bone and lung metastases were present in a smaller proportion of patients (27.6 and 9.9%, respectively). Median CgA for all NETs 6 months before RP was 213 pmol/L [Interquartile 1 (Q1)=67 and 3 (Q3)=664.5 pmol/L] compared to 166 pmol/L (Q1 52, Q3 535 pmol/L) one year before RP,  $T = 598.5$ ,  $p = 0.07$ . Significant results were found for PNETs [median CgA 6 months before RP: 100 pmol/L (Q1 53, Q3 286.25 pmol/L) and at 12 months: 52 pmol/L (Q1 36.25, Q3 128 pmol/L),  $T=52$ ,  $p = 0.048$ ], but not for midgut NETs [median CgA 6 months before RP: 389.5 pmol/L (Q1 131.5, Q3 791.5 pmol/L) and at 12 months: 319 pmol/L (Q1 158, Q3 753 pmol/L),  $T=191$ ,  $p = .39$ ]. Both midgut and PNETs CgA values were significantly higher at RP than 12 months before [267 pmol/L (Q1=66, Q3=777) vs. 166 pmol/L (Q1=52, Q3=535),  $T = 394.5$ ,  $p = 0.03$ ]. Overall, G1 tumours had median CgA value at 6 months significantly higher than at 12 months [181(Q1=56.25, Q3=624) vs. 149.5 pmol/L (Q1=44, Q3=247.25),  $T=70$ ,  $p = 0.048$ ].

**Conclusion** CgA seems to have predictive value 6 months prior to RP for PNETs and G1 tumours, which may be of value to identify specific subgroups of patients who may benefit from a more aggressive follow-up with possible early intervention in case of increased CgA levels. Further prospective studies are needed to enable more definitive conclusions.

#### REFERENCES

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**Disclosure of Interest** None Declared.

#### PTH-094 BENEFIT OF REAL TIME CYTOLOGICAL EXAMINATION IN EUS GUIDED BIOPSY OF SUSPECTED PANCREATIC MALIGNANCY

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**Introduction** Endoscopic ultrasound (EUS) guided sampling of advanced malignant pancreatic lesions is increasingly being performed in order to confirm malignancy prior to chemotherapy and/or radiotherapy. The Royal Hampshire County Hospital provides EUS services for central and north Hampshire. Prior to mid-2013 there was no facility for examination of cytological specimens during EUS procedures. In line with national commissioning guidelines, a real time pathology service allowing cytological examination during the EUS procedure was instigated from 1<sup>st</sup> July 2013. The aim of this study was to assess the impact of real time cytological examination on the yield of EUS guided sampling of suspected malignant pancreatic mass lesions.

**Methods** All patients with suspected pancreatic malignancy undergoing EUS guided tissue sampling over a 1 year period from 1<sup>st</sup> January 2013 to 31<sup>st</sup> December 2013 were prospectively audited. Note was made of whether real time cytological examination was performed by a technician  $\pm$  histopathologist. Other data collected included type of needle used, number of passes made with the biopsy needle and total duration of procedure. The diagnostic yield of EUS guided pancreatic sampling was compared with and without real time cytological examination.

**Results** Twenty-seven procedures were performed over the 12 month period. The majority (25 procedures) were performed using Procore™ fine needle biopsy (FNB) needles. Seventeen procedures were performed without real time cytological examination. Of these, 14 (82%) yielded positive cytology, 1 yielded negative cytology (6%) and there was insufficient tissue in 2 (12%) cases. Ten procedures were performed with real time cytological examination and of these all yielded positive cytology. Median number of passes made with the biopsy needle was 2 (range 2–3) without real time cytological examination versus 2 (range 1–4) with real time cytological examination. Mean procedure duration was 30 ( $\pm 12$ ) min without real time cytological examination versus 36 ( $\pm 15$ ) min with real time cytological examination.

**Conclusion** In our centre, the diagnostic yield of EUS guided sampling of suspected malignant pancreatic mass lesions without real time cytological examination was 82% which is in line with published data <sup>1</sup> However, the addition of real time cytological

examination improved yield to 100% without significantly lengthening the procedure duration.

#### REFERENCE

<sup>1</sup> Hewitt MJ *et al.* EUS-guided FNA for diagnosis of solid pancreatic neoplasms: a meta-analysis. *Gastrointest Endosc* 2012; 75(2):319–31

**Disclosure of Interest** None Declared.

#### PTH-095 PORTAL HYPERTENSION DUE TO SPLANCHNIC VENOUS THROMBOSIS FOLLOWING OPEN OR SKUNK WIRE NECROSECTOMY OF ACUTE SEVERE PANCREATITIS

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**Introduction** Isolated splenic vein thrombosis (ISVT) is a well recognised complication of acute pancreatitis with incidences ranging widely but more recently in a large meta analysis reported as approximately 14% with a reported incidence of varices of 53% and a GI haemorrhage rate of 12.3%. There is however less available published data on the incidence and natural history of splanchnic vein thrombosis that occurs with severe necrotizing pancreatitis requiring percutaneous or open necrosectomy.

Our aim was to retrospectively review all patients who underwent minimal access retroperitoneal pancreatic necrosectomy (MARPN) at RLUH from 1998 to 2012 to assess the incidence, natural history and complications of splanchnic vein thrombosis. **Methods** Using a hospital held database we identified all patients who had undergone MARPN or open necrosectomy and had an electronic hospital record. We assessed patient characteristics the incidence of splanchnic vein thrombosis at presentation, at most

recent cross sectional imaging, complications of portal hypertension including incidence of varices and variceal haemorrhage.

**Results** We identified 191 patients who had undergone necrosectomy. 46 cases were excluded from the final analysis as imaging reports made no comment on the portal venous system. The mean age was 56.1 years with a mean apache score of 9 on admission. Overall 31.7% (n = 46) underwent open necrosectomy and 68.3% MARPN necrosectomy. The results are outlined in Table 1.

**Conclusion** The incidence of splanchnic venous thrombosis in pancreatitis requiring necrosectomy is much higher than previously reported cases series assessing ISVT in patients with acute pancreatitis. The true natural history remains splanchnic venous thrombosis related to pancreatitis remains unknown, however in our case series the recanalisation rate was low. However in severe necrotizing pancreatitis portal venous complications should be actively investigated and UGI endoscopy to examine for varices should be carried out such that prophylaxis against variceal haemorrhage can be used where appropriate.

**Disclosure of Interest** None Declared.

#### PTH-096 THE SENSITIVITY OF EUS FNA OF SOLID PANCREATIC LESIONS, WORKING FROM A REGIONAL MDT AND WITHIN A REGIONAL NETWORK

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**Introduction** Endoscopic ultrasound (EUS) guided sampling of advanced malignant pancreatic lesions is increasingly being performed in order to confirm malignancy prior to chemotherapy and or treatment. Meta-analysis of 33 studies examining solid lesion EUS FNA tissue acquisition in 4984 patients showed a pooled sensitivity of 85%, increasing to 91% if suspicious atypia was included <sup>1</sup>. Higher sensitivities have been demonstrated in large volume single operator centres where sensitivities of 92–97% <sup>2,3</sup> have been reported.

The four Wessex EUS centres all work from a regional HPB MDT, where pancreatic cases are discussed and EUS procedures requested. Each centre has two EUS operators, performing between 148 and 214 cases per annum. Additionally the regional EUS endoscopists, pathologists and biomedical technicians meet

Abstract PTH-095 Table 1

	Number	Percentage
Portal venous occlusion at most recent imaging	90	62.07
3 vessel	10	6.90
2 vessel	18	12.41
1 vessel	62	42.76
Recanalisation	7	4.83
Developed occlusion since admission	6	11.1
Endoscopy in patients with vessel occlusion	31	34.44
Varices	12	38.71
UGIB	2	6.45

Abstract PTH-096 Table 1

	Number solid pancreatic masses sampled	Number malignancy confirmed	False negative for malignancy on clinical /radiological findings	Insufficient sample	True negative for malignancy, on clinical /radiological findings	Sensitivity
Centre 1	28	24	0	0	4	100%
Centre 2	14	14	0	0	0	100%
Centre 3	17	11	0	1	5	92%
Centre 4	18	15	2	0	1	88%
Total	77	64	2	1	10	96%